C8650-4

Volume 63, Number 10
October 1985

09035 1984293 W 4 1984
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CONGRESSIONAL INFO SERVIC D
4520 EAST WEST HWY
BETHESDA MD 20814

Electric Light & Power

THE NEWS MAGAZINE OF ELECTRIC UTILITY MANAGEMENT AND TECHNOLOGY

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Nuke-to-coal switch nixed in Texas, still alive in Ohio

The South Texas Project, one of the two nuclear projects being considered for conversion to coal, looks like it's going to continue as a nuclear plant. The other one, Zimmer, is still pursuing the conversion concept.

Conversion of South Texas Project to coal was declared economically unfeasible by a study just completed by Sargent & Lundy. The study was commissioned last fall at the insistence of the Austin, Texas Electric Dept., one of the four owners.

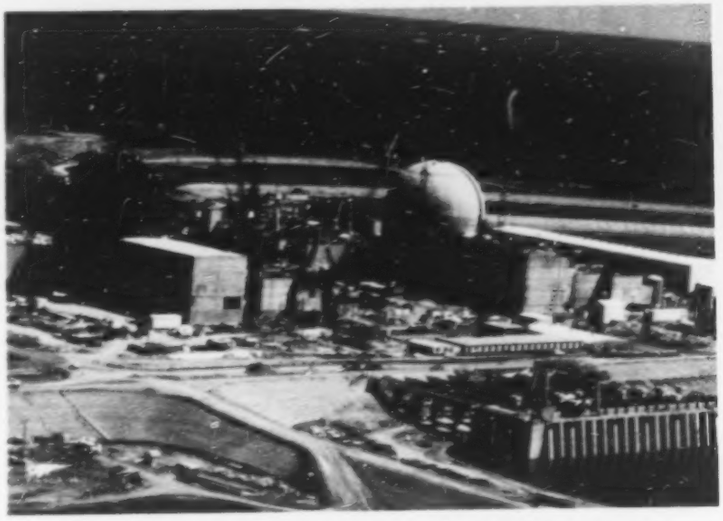
A spokesman for lead STP owner, Houston Lighting and Power, said his company's view that conversion never was viable has been confirmed by the study. "The issue is closed," he said.

That opinion was shared by a spokesman for San Antonio City Public Service who said, "The results are in and that's that."

The twin-unit STP is currently under active construction.

Progress at Zimmer

Meanwhile, a settlement conference got underway at the Ohio Public Service Commission to see if an agreement could be worked out on the Zimmer conversion proposal. The main issue there is the accounting treatment of the investment in the 800-MW single unit project that was cancelled in 1984.



Owners of the nearly complete but cancelled Zimmer nuclear project want to convert it to coal.

The owners requested that interested parties hold the conference to hammer out a deal rather than go to a PUC hearing. They hope all parties involved can agree on a package prior to taking it to the full commission.

W. H. Dickhoner, president of Cincinnati Gas & Electric, Zimmer's lead owner, recently told New York security analysts, "...we expect that a stipulation in this case would determine what portion of the costs of the existing plant will be disallowed from rate base. We are optimistic that the settlement conference can reach a conclusion in an expeditious manner, so that a stipulation in the case can be presented to the commissioners for approval early this fall."

The conference is being attended by the owners, the Ohio PUC staff, the Ohio Consumers Counsel, and representatives of some large industrial electric customers. Several meetings have been held but no details of results have been announced.

Zimmer was cancelled at the 97 percent completion point with about $1.7 billion invested. The cancellation stemmed from a dispute with the Nuclear Regulatory Commission over construction quality assurance. The owners said it would have cost $1.5 billion more to finish the plant, which they refused to do.

The owners commissioned Ebasco and National Economic Research Associates to study the viability of converting it into a coal-fired plant.

Last summer the owners reported that the study results were favorable and that they would proceed with engineering on the coal conversion. The plan is to use about 45 percent of the investment in the nuclear plant in a coal plant. Usable nuclear facilities are chiefly in the back end—the steam turbine, generator, cooling tower, etc.

An additional investment of $1.7 billion will provide a 1300-MW coal-

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MSU and operating companies struggling to stay afloat

Don Minner
Associate Editor

NEW ORLEANS—Two of the four financially-troubled subsidiaries of Middle South Utilities can breathe a little easier now.

Both Arkansas Power & Light (AP&L) and New Orleans Public Service (NOPSI) were granted limited rate increases by their respective public utility commissions in early September in order to help pay the utilities' portions of the Grand Gulf-1 nuclear plant.

AP&L, NOPSI, Mississippi Power & Light (MP&L) and Louisiana Power & Light (LP&L) have been struggling to make their monthly payments for their respective portions of the plant, which went into service July 1.

Middle South Energy, an MSU subsidiary, owns 90 percent of Grand Gulf-1.

The financial situation for the utilities became so dire in late August that all of the operating companies stopped payment of their common dividend to MSU.

That prompted MSU to declare Aug. 29 that it would not be able to pay out its common stock dividend. MSU spokesman Cyril Guerrera said it was the first time in 144 consecutive quarters that a common stock dividend had been missed.

MSU's Board of Directors stated, "...until greater progress is made on the various legal and regulatory fronts with respect to emergency or full rate relief for the System operating companies regarding their Grand Gulf payments, we believe omission of the dividend of 44.5 cents for the third quarter is the most prudent course of action."

The utility has a total of approximately 400,000 stockholders.

All four operating companies have battled back and forth with their various regulatory bodies and state and federal courts during the past year in efforts to obtain rate relief to pay for the nuclear unit.

AP&L gets relief

In early September, the Arkansas Public Service Commission voted 3-0 to approve an agreement that settles AP&L's rate case and resolves all open issues involved in thirteen different regulatory and court cases.

AP&L spokesman Charles Kelly explained that negotiations had been going on for several weeks between the utility, the state attorney general, the PSC staff and a group of AP&L's largest industrial customers.

All of the parties agreed to terminate various other proceedings in addition to the rate case, including seven other cases before the PSC and five cases in state or federal court. Also, the intervenors agreed to withdraw their opposition to three AP&L financing requests filed with the Securities and Exchange Commission.

According to terms of the ten-year phase-in, the utility will receive a $45.8 million general rate increase and $35.5 million for its share of Grand Gulf during the first year.

Kelly said the settlement recognizes various accounting procedures that permit AP&L to use the sale of securities to help finance its Grand Gulf payments during the early years of the plan.

According to Kelly, AP&L had reached its credit limit with 60 banks.

AP&L's monthly Grand Gulf payment amounts to approximately $30 million. The utility owns 36 percent of the unit.

"This doesn't take us back to business as usual," admitted Kelly. But, he added, that on the whole "it is a fair and equitable resolution."

Emergency aid for NOPSI

Meanwhile, in New Orleans, the city council voted Sept. 5 to allow NOPSI emergency rate relief of $28.3 million over the next ten months, far short of its $118 million request.

NOPSI spokesman Bill Tregre said the utility has a monthly payment of

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Slow second quarter growth blamed on milder weather

BARRINGTON, IL—Milder than usual weather contributed heavily to disappointing revenue and earnings growth for many electric utilities in the second quarter.

According to an *EL&P* random survey of 29 electric companies (see table) and interviews with electric utility analysts, declines in revenues and earnings were prevalent for the period.

Commenting on the cause of the slow-up, utility analyst Pat Madden, Duff & Phelps, said, "It was the nicest spring we've had in 10 or 11 years."

He said earnings growth and electricity sales were generally down in the quarter.

Electric sales dropped 7.0 percent at Philadelphia Electric. The company attributed it to cooler weather.

Illinois Power, which saw significant decreases in earnings and revenues, said sales of electricity and gas were down.

A 17 percent decline in earnings at Dominion Resources for the period was also blamed on lower kilowatthour sales and milder weather.

Gas sales drop

The gas segments of MDU Re-

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News Briefs

● **Seabrook's** joint owners voted in August to increase funding for the project to a level of $8 million per week. New Hampshire Yankee said the increase from the previous $5 million per week funding level is conditioned on the New Hampshire Public Utilities Commission lifting spending restrictions imposed on Public Service Company of New Hampshire. A decision was expected to be made sometime in mid-September. PSNH is currently limited to contributing no more than its share of a $5 million per week funding level.

● **The Montana Public Service Commission** has announced it will appeal a district court order that overturned its 1984 ruling on Montana Power's Colstrip Unit 3 coal-fired plant. The announcement came shortly after the PSC said it had decided it would not join with Montana Attorney General Mike Greeley in appealing the decision. The MPSC stated that it believes its original decision not to appeal was correct, but feels its knowledge and expertise must be made available in the case if an appeal is pursued by the attorney general. The MPSC had denied the utility any return on its investment in the unit. The district court remanded the order back to the commission for reconsideration. Also in August, the PSC authorized an $80.4 million annual electric rate increase to be phased in over eight years. Montana Power said the increase principally recognizes costs associated with the utility's 30 percent interest in the 700 MW unit.

● **The California Public Utilities Commission** has decided to look into the feasibility of basing payments for the electricity from Pacific Gas & Electric Company's Diablo Canyon nuclear plant on the economic value of the energy produced rather than on the cost of plant construction. California currently uses two different methods for setting the price that utility customers pay for electricity. Under the traditional "cost of service" method, the commission determines which utility costs are reasonable and prudent. The other method, which the PUC is studying for Diablo Canyon, is value-based pricing. Under that method, the commission determines the economic value of the electricity produced without reviewing the producer's costs or operating expenses. PUC President Donald Vial said the PUC's goal "will be to try to find the best method of maintaining the lowest reasonable costs for Diablo Canyon over the 30-year expected life of the plant." Vial said he recognizes that it will be difficult to come up with a value-based pricing formula that is fair to everyone. The commission said that the issue, in a sense, is whether the plant should be viewed as the last California power plant built under traditional regulation, or the first built under the new rules for power generation.

● **Pacific Gas & Electric Co.** was issued a full power operating license August 26 by the NRC's Office of Nuclear Reactor Regulation for its 1,106 MW Diablo Canyon Unit 2.

● **Britain's Central Electricity Generating Board** plans on building a "small family" of pressurized water reactor power plants, according to the London Press Service (LPS). The plan would go into effect if the go-ahead is given to introduce the PWRs at Sizewall in eastern England. LPS reports that a recommendation on the plants is expected to be sent to the UK government by the end of this year. If approval to build is granted, the CEGB explained that it plans to start site work on the 1175 MW plant in September 1986. The project would create approximately 10,000 jobs for seven years. CEGB Chairman Lord Marshall said, "The board has indicated that if it gets consent to build Sizewell B it would like to replicate the design for a small family of similar power stations so as to gain the full economic return from investment in PWR technology." LPS said the CEGB is investigating other potential sites at two existing power plants in North Wales.

● **Atomic Energy of Canada Ltd.**, the Canadian government agency, has signed an agreement with Turkey to construct, own and partially operate a 665 MW CANDU nuclear reactor. *The Wall Street Journal* reported in August that the agency will design the heavy water reactor valued at $1.1 billion, which will be built in southern Turkey. The newspaper said the plant will be 40 percent-owned by Turkey and 60 percent-owned by a consortium, in which Turkey is the major participant. The consortium, which includes NEI Parsons Ltd. and Enka Holding Yatirim AS, will operate the reactor and sell the power to Turkey for the first 15 years. The group then will sell its equity and turn over the plant to Turkey.

● **The National Rural Utilities** Cooperative Finance Corporation (CFC) has had a record year. Reporting on its fiscal year ending May 31, CFC said it recorded a net margin of $32 million with total loans outstanding of $2.78 billion. In 1984 CFC had $27.7 million in margins and $2.68 billion in outstanding loans. CFC stated that its assets at the end of the fiscal year were $3.05 billion compared to $2.84 billion last year. Members' equity and investments in CFC rose to $1.79 billion on May 31, from the previous year's $1.45 billion. Of that amount said CFC, member equity increased from $116 million in 1984 to $142 million at the end of the past year. CFC is owned by more than 900 rural electric organizations.

● **Five Iowa utilities** are investing money in the new Iowa Venture Capital Fund that has been formed to foster economic development in the state. The fund is a limited partnership for making investments in privately held companies. The gas and electric utilities are investing a total of $1.05 million in the venture capital fund. They are Iowa-Illinois Gas and Electric, Interstate Power, Iowa Public Service, Iowa Resources, and Iowa Southern Utilities. The fund's general partners are Jerry M. Burrows and InvestAmerica Venture Group, Inc. The limited partners are Life Investors Insurance Co. of America, Central Life Assurance Co. and Statesman Financial Services, Inc. The partnership is expected to operate for an initial term of 12 years and invest from $10 to $15 million.

● **The Atomic Safety and Licensing Board** ruled in August that Long Island Lighting Company cannot have an operating license for its Shoreham nuclear plant. The ASLB said, "...that there is no reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Shoreham...". According to the ASLB, LILCO's emergency plan was defective on two grounds. First, said the board, LILCO doesn't have the authority to implement the plan it submitted. Secondly, opposition by New York state and Suffolk County to the plan creates uncertainty as to whether the plan would be workable. LILCO spokesperson Carol Clawson said an appeal is pending with the Atomic Safety and Licensing Appeals Board.

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'Energy Independence' marks 2nd year

New England Electric's coal-fired, coal-carrying ship 'Energy Independence' celebrated its second birthday in August. The vessel has delivered over five million tons of coal. The ship carries domestic coal from ports in Philadelphia, Baltimore, Newport News and Norfolk to New England Electric plants in Somerset and Salem, Mass. The ship's unique self-unloading system allows it to discharge its cargo in 12 hours.

Toledo Edison, CEI merger papers filed

TOLEDO, OH—Documents have been filed with the Securities and Exchange Commission by Toledo Edison and the Cleveland Electric Illuminating Co. requesting approval of their merger.

In the documents, the utilities said that formation of a holding company will enable them in the long term "to achieve benefits of increased financial ability and strength, improved and unified management, efficiencies of operations, better use of the facilities for the benefit of customers, reduced requirements for future generating capacity, improved abilities to utilize new technologies and greater industrial sales diversity."

Name not selected

A name for the new holding company has not yet been selected. As operating companies, Toledo Edison and CEI will retain their names.

Slow 2nd quarter . . .
from page 1

sources, Iowa Resources and KPL Gas Service were affected by the weather. All three said the mild weather caused gas sales to decline.

Mark Luftig, a utility analyst with Salomon Brothers in New York, pointed out that earnings were down for the industry as a whole in the second quarter by three and a half percent.

"The second quarter was pretty much as expected," noted Luftig.

He cited several outstanding performers for the period that included Consumers Power, Montana Power, Public Service of New Hampshire, United Illuminating and Minnesota Power.

Some utilities improved

All was not bad in the quarter however. PacifiCorp reported higher quarterly revenues for its three major segments—Pacific Power, Pacific Telecom and NERCO. Also, the company posted a 22 percent increase in kilowatt-hour sales. Pacific Power said sales to other utilities were "up substantially."

AZP Group Vice President and Treasurer Henry B. Sargent tied his company's earnings increase to higher sales. He pointed out that the company's subsidiary, Arizona Public Service, experienced a very warm spring and has continued to add customers at an anoual rate of nearly five percent.

Earnings for the second quarter rocketed almost 58 percent at Puget Power. The utility said a recent rate increase, increased sales and a strong cost-containment program were reasons for the improvement.

Louisville Gas & Electric Co. and Central Hudson Gas & Electric both realized higher sales in the quarter.

Rate increases aided Green Mountain Power Corporation's and FPL Group's second quarter financial statements.

SELECTED SECOND QUARTER EARNINGS

	Operating revenues, 1985 (thousands)	Operating revenues, 1984 (thousands)	% Change	Earnings per share, 1985	Earnings per share, 1984	% Change
[illegible]	[illegible]	[illegible]	+18.8	[illegible]	[illegible]	+17.8
Central Hudson G&E	117,923	122,464	-3.7	1.03	1.01	+2.0
[illegible]	[illegible]	[illegible]	-6.1	[illegible]	[illegible]	-30.0
Consolidated Edison	1,209,270	1,246,040	-3.0	.61	.64	-4.7
[illegible]	[illegible]	[illegible]	-7.5	.41	.42	-2.4
Dominion Resources	608,352	599,341	+1.5	.53	.64	-17.2
[illegible]	[illegible]	[illegible]	-11.3	.44	.56	-21.1
FPL Group	1,062,466	967,614	+9.8	.78	.49	+59.2
[illegible]	[illegible]	[illegible]	-4.4	.31	.34	-8.8
Houston Indus.	1,114,373	1,189,523	-6.3	1.30	1.22	+6.6
[illegible]	[illegible]	[illegible]	-14.7	.80	.93	-13.8
IPALCO	107,144	108,724	-1.5	.81	.94	-13.8
[illegible]	[illegible]	[illegible]	-9.4	.28	.32	+13.4
Iowa Resources	97,153	100,651	-3.5	.49	.65	-24.6
[illegible]	[illegible]	[illegible]	-19.2	.69	.87	-25.4
Louisville G&E	144,192	150,716	-4.3	.66	.81	-18.5
[illegible]	[illegible]	[illegible]	-5.3	.40	.45	+2.2
Minnesota Power	105,370	99,436	+6.0	1.18	1.07	+10.3
[illegible]	[illegible]	[illegible]	-6.8	.34	.38	-10.4
NSP	386,900	393,300	-1.6	1.17	1.29	-9.3
[illegible]	[illegible]	[illegible]	+7.6	.77	.66	+16.7
PP&L	480,432	351,310	+36.8	.48	.59	-18.6
[illegible]	[illegible]	[illegible]	-2.8	.57	.58	-1.7
Portland General Elec. Co.	165,988	153,363	+8.2	.25	.51	+51.0
[illegible]	[illegible]	[illegible]	+17.7	.67	.60	+11.7
PSNM	173,598	109,574	+58.4	.55	.56	-1.8
[illegible]	[illegible]	[illegible]	+8.1	.30	.19	+57.9
SCANA	251,487	263,353	-4.5	.60	.59	+1.7
[illegible]	[illegible]	[illegible]	+0.3	1.20	1.22	-1.6

E.F. Hutton's Raymond Moore said the market price for the electric industry as a whole was up 11 percent in the second quarter. "The group did pretty well," he contended.

Moore compared the performance to the Standard & Poor's 400 Index of industrials which rose only four percent. It was defensive environment in the second quarter and Moore said that means investors go to utilities.

Earnings will be flat

He predicts that earnings growth over the next few quarters will be flat or down. Moore said many utilities are not able to justify large rate increases. He doesn't think construction activity will pick up and says financing will be "miniscule" in the next few years.

"As a whole," noted Madden of Duff & Phelps, "the industry's problems are becoming more manageable."

But, he said he has a feeling that the third quarter may not look great. Madden mentioned that most of the country has experienced a mild summer, resulting in lower sales.

Luftig predicts that second half earnings of utilities will increase four percent.

"The whole of the industry is an improving pattern," declared Robert Burke of Moody's Investors Services.

Burke noted that many utilities are completing construction programs and gradually improving their finances. He said construction expenditures are easing off, internal cash is accumulating and external financing is declining.

Burke pointed out that Moody's upgraded bond ratings of several utilities in the second quarter. They included Central Hudson Gas & Electric, Niagara Mohawk Power, San Diego Gas & Electric, Tucson Electric and Union Electric. He explained that all the companies generally have reasonable regulation and are nearing the completion of construction. Burke said Moody's expects earnings to improve at the utilities.

Nuke-to-coal switch . . .
from page 1

fired plant with a design similar to the basic design now being used by AEP, one of the Zimmer owners.

The plan calls for AEP Service Corp. to design and build the coal plant. It is currently working on engineering. Specs for the sulfur dioxide scrubber and precipitator have been issued to prospective suppliers who have been invited to submit bids.

The key question is: how much of the $1.7 billion already spent on the nuclear plant will be allowed into the rate base for the completed coal-fired plant. A commitment to full-scale work on the project awaits that determination.

The owners are hopeful that enough will be allowed to make the venture attractive. No specific target has been set, but, as mentioned, a working figure of 45 percent has been discussed.

Said Dickhoner to the New York analysts, "We are still planning to begin major construction in 1987 with completion and operation of the coal conversion scheduled for 1991."

South Texas

The situation is substantially different at the South Texas Project because it's still under construction. There are two 1250-MW units: Unit 1 is 84 percent complete and unit 2 is 55 percent finished. Unit 1 is slated for operation in 1987 and unit 2 in 1989. The owners currently estimate that STP will cost $5.5 billion.

A disagreement among the owners about project schedules led to the full-scale Sargent & Lundy conversion study. Completed last August, the study concluded, "The conversion of STP to coal firing is judged to be technically possible, but economically not justifiable."

An economic analysis compared the generating cost of electricity produced in a coal plant with the costs of electricity from the completed nuclear plant (which, it should be noted, was not an option at Zimmer.) The nuclear case was the lower-cost option for all the owners. The study found that the present worth of lifetime savings for all owners for the nuclear case is $3.5 billion. The analysis assumes that all nuclear investments are recovered.

Sargent & Lundy estimated that $1.5 billion of the $3.9 billion already spent at South Texas Project could be used in a coal plant. The study showed it would require an additional $3.7 to $4.8 billion to accomplish the conversion. The completed coal plant would have had up to 1300-MW more generating capacity than the 2500-MW nuclear station under construction.

Said Jamie Axtell, manager of generation and environmental planning for San Antonio City Public Service, which oversaw the study, "We believe the preponderance of evidence clearly shows that converting the STP to a coal plant is definitely not in the best interests of utility ratepayers. Besides, construction of the STP as a nuclear plant continues to move forward in steady fashion."

The most economical coal conversion plan called for adding supercritical, reheat coal-fired topping cycles. Net plant heat rate was estimated to be 9800 Btu/kWh.

The report said there were intangible factors that could make the conversion even more costly than estimated. For example, in order to use the large turbine-generators in place for the nuclear plant, the topping cycles would require large, multiple coal-fired boilers. "The complexity of the component installation," said Sargent & Lundy, "unlike any previous coal-fired plant, could cause degraded reliability beyond the numerical predictions in this report, as well as higher operating and maintenance costs than those reported herein." The equivalent forced outage rate estimated for the reheat topping cycle was 29 percent.

"The major steam turbine components, particularly those associated with the reheat cycles, would see operating conditions unlike those of a standard cycle," said the report, adding, "The reheat cycles would require a one-of-a-kind turbine design."

TMI-1 restart put in holding pattern

HARRISBURG, PA—With a go-ahead from a federal appeals court on August 27, GPU Nuclear seemed to be on the verge of restarting its Three Mile Island Unit 1.

That is until two days later when Judge Collins Seitz of the Third U.S. Circuit Court of Appeals continued his original stay of the Nuclear Regulatory Commission's May ruling allowing the plant to be restarted.

Court ruled 2-1

A three judge appeals court ruled 2-1 that the NRC had heard enough evidence before granting the utility permission to operate the unit. While GPU Nuclear was awaiting approval from the NRC to start the unit, Judge Seitz continued his original stay on August 29 to allow petitioners time to file appeals of the decision.

Petitioners opposed

Petitioners opposed to restart include The Union of Concerned Scientists, Three Mile Island Alert, and Pa. Gov. Richard Thornburgh.

GPU Nuclear spokesperson Lisa Robinson said, in early September, that the petitioners are asking that the case be heard by the full Third U.S. Circuit Court of Appeals.

In the meantime, noted Robinson, GPU Nuclear will be asking that the stay be lifted.

She said unit 1 is being kept in a "hot standby" condition.